

General Disclaimer

One or more of the Following Statements may affect this Document

- This document has been reproduced from the best copy furnished by the organizational source. It is being released in the interest of making available as much information as possible.
- This document may contain data, which exceeds the sheet parameters. It was furnished in this condition by the organizational source and is the best copy available.
- This document may contain tone-on-tone or color graphs, charts and/or pictures, which have been reproduced in black and white.
- This document is paginated as submitted by the original source.
- Portions of this document are not fully legible due to the historical nature of some of the material. However, it is the best reproduction available from the original submission.



UNIVERSITÀ DEGLI STUDI DI MILANO
CATTEDRA DI FISICA TERRESTRE

VIA G. B. VIOTTI, 3/R - TEL. 298.707
20133 MILANO

E7.6-10077

CR-145806
II

"Made available under NASA sponsorship
in the interest of early and wide dis-
semination of Earth Resources Survey
Program information and without liability
for any use made thereof."

RECEIVED
NASA STI FACILITY
ACQ. BR.

DEC 12 1975

101045617

DISCO PROJECT

First Quarterly Report

by Carlo M. Marino

Geomorphic and Landform Survey of Northern Appennini.

Investigation N. 28450

Cattedra di Fisica Terrestre dell'Università di Milano and
Istituto per la Geofisica della Litosfera del C.N.R.

(E76-10077) GEOMORPHIC AND LANDFORM SURVEY
OF NORTHERN APPENNINI Quarterly Report
(Milan Univ.) 4 p HC \$3.50 CSCL 08G

N76-14560

Unclas

G3/43 00077

October 31, 1975

28450

RECEIVED

NOV 04 1975

SIS/902.6

1) Introduction

Following the shipment of the first available Landsat 2 images arrived in Italy on middle July, this report will explain the preliminary steps in the accomplishment of the proposed program.

2) Techniques.

Up to day the following coverages are available over the main test area.

14	Jun	1975	ID	214309275
6	Jul	"	"	219609213
20	Jul	"	"	217909273
1	Jul	"	"	216009221
7	Ag	"	"	219709271

over the areas surrounding the main test site (4 MSS bands) the following images are also on study

14	Jun	1975	ID	214309273
15	Jun	"	"	214409334
3	Jul	"	"	216209331
3	Jul	"	"	216209333

Moreover a retrospective order was placed and the following images are on study regarding the period before the signature of the investigation.

8	Febb	1975	ID	201709200
---	------	------	----	-----------

for the main test site and

8	Febb	1975	ID	201709274
24	Febb	"	"	2033049164

for the areas relate to the main test site.

First approaches have been completed for the utilizations of Landsat 2 images in achieving the goals freseen.

The approach for the study was divided into:

- a) Utilization for the existing data and their comparison with Landsat 2 images (maps and airphotos)
- b) Ad hoc surveys : ground contrdls on selected areas
 - : MSS (Daedalus 1250) flight over Staffora Valley (main test site)
 - : Multiband al T.I.R. scanner flight (Daedalus 1230) in the areas included in the proposal.

The surveys and flights have been done in connection with Landsat 2 orbits.

At present time false color compositions have been ordered at EROS regarding the more significant images.

Moreover it has to be pointed out that a grant was obtained few weeks ago from National Research Agency (C.N.R.) to support the acquisition of sophisticated hardware for image analysis.

3) Firsts Accomplishments and Results

The successful orbit of Landsat 2 provided a lot of good data presently on study.

Short delay is foreseen in the aquisition of the proposed results.

In the meantime basing on the comparison of Landsat 2 and ground and airborne data some points of particular interest have been chosen.

Particularly promising was the finding on Landsat images of a correlation between runoff, soil erosion, turbidity of Po river and plumes of Po in Adriatic sea.

4) Problems.

Late arrival of grants created some problems at our organization but in few weeks they were solved.

From the point of view of data quality and delivery we found them adequate to our program especially for what deals with resolution of the imagery and test site coverage.

5) Recommendation and conclusions.

Our group has found the data of Landsat of the maximum utility also for problems outside the ones of our deep interest.

The impact of these new data and the capability of iterative coverage for the study of applicative aspect of earth resources management enabled us to face with a new kind of operative approach to the

study of Northern Appennini and relate area dynamic phenomena.
In this framework and basing on the present quality of Landsat 2 images a program of applicate research over Northern Appennini for a period ranging from three to five years has been presented for an appropriate grant to our Central Authorities . It approved it will represent the logic continuation of the NASA Disco program and will include also the utilization of the foreseen Landsat C platform.
NASA will be informed as soon of the result of the above mentioned proposal.

P.I. Carlo M.MARINO